

Amendments to the Drawings:

No amendments are made to the Drawings herein.

REMARKS

Applicant notes that a Notice of Abandonment in the above-captioned matter was mailed on October 4, 2005. However, Applicant respectfully requests that this Notice of Abandonment be withdrawn, since this Response and the accompanying RCE are being filed with the requisite time extension pursuant to 37 CFR 1.136(a) and within the 6-month statutory period for responding to the outstanding Final Office Action mailed on June 3, 2005. The Notice of Abandonment was issued due to a miscommunication between the Examiner and Applicant's representative. On or about September 29, 2005, the Examiner telephoned Applicant's representative and left a voice message inquiring as to whether a Response to the outstanding Final Office Action had been filed. On September 30, 2005, Applicant's representative telephoned the Examiner and left a voice message informing him that no Response had been filed. The Examiner interpreted the voice message left by Applicant's representative to mean that no Response would be filed, and issued a Notice of Abandonment. However, this is not what Applicant intended -- Applicant did in fact intend to file the present Response. The voice message left by Applicant's representative was merely intended to inform the Examiner that no Response had yet been filed. Applicant's representative telephoned the Examiner immediately upon receipt of the Notice of Abandonment and explained the situation to the Examiner, and the Examiner agreed that the Notice of Abandonment would be withdrawn upon the filing of a Response to the outstanding Final Office Action along with the requisite extension fees. Applicant's representative apologizes for the any part he played in the misunderstanding.

By the foregoing Amendment, Claims 1, 15, 16, 18, 19, 25, 36, 37 and 39 are amended and Claims 13, 14, 17, 34, 35 and 38 are cancelled. Entry of the Amendment, and favorable consideration thereof is earnestly requested.

All claims stand rejected either under 35 U.S.C. 102(b) as being anticipated by Saadatmanesh et al. (U.S. Patent No. 5,242,438), or under 35 U.S.C. 103(a) as being unpatentable over Saadatmanesh et al. in view of Kittrell et al. (U.S. Patent No. 5,104,392). Applicant respectfully asks the Examiner to reconsider these rejections in view of the above Amendments and the below Remarks.

The present invention is directed to an apparatus for applying light to a site to be treated on a wall of a vessel in the human or animal body, in particular for laser welding of two vessels to one another. The apparatus includes a light-feeding instrument that guides light generated by an extracorporeal light source to the site and radiates it onto the latter. The light-feeding instrument has an elongated optical conductor that can be inserted into the lumen of the vessel and can be displaced therein in the longitudinal direction of the vessel, and has light-deflecting means that direct the light fed through the optical conductor in a substantially radial fashion onto the site to be treated. Moreover, all claims have been amended to require that the apparatus also include holding means for fixing the vessel during the application of the light, the holding means having a balloon that extends axially beyond a distal end of the light guide and beyond the light-deflecting means and surrounds the light guide and the light-deflecting means.

These highlighted requirements are important in that configuring the balloon to surround the light guide and the light-deflecting means allows for the fixing of the two vessels to one another for the welding operation, by permitting the two vessels to be aligned with one another very precisely, for example in the case of an end-to-end join, without axial offsetting, thereby making it possible to produce a very clean weld between the vessels. This is best illustrated in Figures 3(b) and 3(c) of the present application.

Applicant respectfully submits that neither of the cited prior art references, either alone or in combination, discloses, teaches or suggests in any way at least the above-highlighted requirements of all claims.

Saadatmanesh et al. discloses a method and device for directing laser radiation to a body cavity site. A hollow, elongate, optical fiber is advanced, usually in a containing device, to the vicinity of the site and coupled to a laser source with a distal end region of the fiber extending along a longitudinal axis. The fiber terminates in an energy delivery surface for emitting laser radiation transmitted by the fiber. The radiation is intercepted at a location axially aligned with the energy delivery surface and is reflected in a beam radiating substantially transversely of, and substantially circumferentially around, the axis. A reflector member or block is provided for reflecting the radiation and is mounted in an open end of the catheter at a selected axial position along the axis. A fluid, such as a flushing fluid, can be directed between the end of the fiber, against the reflector member, and to the body site.

However, as is expressly recognized by the Examiner on page 3, lines 11-12, Saadatmanesh et al. does not disclose, teach or suggest in any way a holding means for fixing the treatment apparatus within the blood vessel.

Kittrell et al. discloses a laser catheter wherein optical fibers carrying laser light are mounted in a catheter for insertion into an artery to provide controlled delivery of a laser beam for percutaneous intravascular laser treatment of atherosclerotic disease. A transparent protective shield is provided at the distal end of the catheter for mechanically displacing intravascular blood and protecting the fibers from the intravascular contents, as well as protecting the patient in the event of failure of the fiber optics. Multiple optical fibers allow the selection of

tissue that is to be removed. A computer controlled system automatically aligns fibers with the laser and controls exposure time. Spectroscopic diagnostics determine what tissue is to be removed.

In one embodiment (best seen in Figure 7E), Kittrell et al. does disclose that a flexible balloon 12e may be used as an optical shield, and may be inflated with pressurized gas or fluid in order to partially conform to the tissue it contacts. However, the balloon of Kittrell et al. is disposed at the end of the laser catheter, and it does not surround a light guide and a light-deflecting means which reflects light emerging from the light guide toward a site to be treated on a wall of a vessel, as is required by all claims, as amended.

Moreover, Applicant respectfully submits that it would not have been obvious to have modified the balloon of Kittrell et al. to have arrived at the present invention, as claimed.

It is well settled that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination or modification. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). In the present case, Kittrell et al. is directed to a device for treating atherosclerotic disease, and Kittrell et al. teaches that laser light is emitted from an end of a laser catheter. As such, there would be absolutely no reason to modify the balloon of Kittrell et al. to surround a light guide and a light-deflecting means which reflects light emerging from the light guide toward a site to be treated on a wall of a vessel. Moreover, the balloon of Kittrell et al. is provided in order to mechanically displace intravascular blood and protect the fibers from the intravascular contents, as well as protecting the patient in the event of failure of the fiber optics. The balloon is not provided in order to

permit two vessels to be aligned with one another very precisely, for example in the case of an end-to-end join, without axial offsetting, thereby making it possible to produce a very clean weld between the vessels. As such, again, there would be absolutely no reason to modify the balloon of Kittrell et al. to surround a light guide and a light-deflecting means which reflects light emerging from the light guide toward a site to be treated on a wall of a vessel.

Moreover, even if Kittrell et al. were combined with Saadatmanesh et al. as suggested by the Examiner, the resulting device would be a treatment apparatus having a reflector member for reflecting radiation transversely of a longitudinal axis (as taught by Saadatmanesh et al.) which includes a balloon at the end thereof for holding the apparatus in place within a vessel (as taught by Kittrell et al.). The hypothetical device resulting from the combination suggested by the Examiner would not include a balloon surrounding a light guide and a light-deflecting means which reflects light emerging from the light guide toward a site to be treated on a wall of a vessel, as is required by all claims, as amended.

For the foregoing reasons, Applicant respectfully submits that all pending claims, namely Claims 1, 2, 4-12, 15, 16, 18-33, 36, 37 and 39-44, are patentable over the references of record, and earnestly solicits allowance of the same.

Respectfully submitted,



Wesley W. Whitmyer, Jr., Reg. No. 33,558
Todd M. Oberdick, Reg. No. 44,268
ST. ONGE STEWARD JOHNSTON & REENS LLC
986 Bedford Street
Stamford, Connecticut 06905-5619
(203) 324-6155
Attorneys for Applicant